

Date: April 6, 2021

ADDENDUM NO. One (1)

PROJECT NO: 118686

TITLE OF PROJECT: Lake Dam Improvements

FACILITY LOCATION: Buescher State Park

NOTICE TO ALL BIDDERS:

This addendum shall be considered part of the Contract Documents and is issued to change, amplify, or delete from or otherwise explain the documents where provisions of this addendum differ from those of the original contract documents. This addendum shall have precedence over the original contract documents and shall govern.

Bidders are hereby notified that they shall incorporate this addendum in their bid, and it shall be construed that the Contractor's Bid shall reflect with full knowledge, all items, changes, and modifications to the contract documents herein specified.

Bidders are advised to check for updates, addenda issuance, and bid opening date changes at the TPWD Infrastructure Division Website:

http://www.tpwd.state.tx.us/business/bidops/current_bid_opportunities/construction/

REPLACE the original Contractor's Bid Schedule issued in the solicitation package on March 12, 2021 with the attached **Revised Contractor's Bid Schedule** (10 pages)

REPLACE page 4 of Technical Specifications, "Special Instructions to Bidders" with attached **Revised Special Instructions to Bidders** (1 page)

REPLACE pages 116-122 of the Technical Specifications, Section 05 05 23.16 – Structural Welding with the attached **Section 05 05 23.16 – Structural Welding** (7 pages)

REPLACE

-Sheet C5.02, with attached **Revised Sheet C5.02**

-Sheets L2.01 and L2.02, with attached **Revised Sheets L2.01 and L2.02**

ATTACHED are the questions received within the timeframe stipulated in the Request for Competitive Sealed Proposal of a General Contractor and Contract Documents. Answers are provided immediately following each question. *(2 pages)*

Bidders shall acknowledge receipt of this addendum in the space provided on the Contractor's Bid Schedule form located above the signature block. WARNING: BIDDER'S FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA MAY RESULT IN REJECTION OF BID.

END OF ADDENDUM NUMBER One (1)

Sincerely,

**Will Andres, CTPM, CTCM
Contract Manager
Infrastructure Division**

TEXAS PARKS AND WILDLIFE

REVISED CONTRACTOR'S BID SCHEDULE PER ADDENDUM ONE (1)

Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Having carefully examined the Invitation for Bids and Contract Documents. Project No. 118686, Lake Dam Improvements at Buescher State Park, Smithville, Bastrop County, Texas for the Texas Parks and Wildlife Department, as well as the premises and conditions affecting this work, and all other contract documents, the undersigned proposes to furnish all labor, equipment and materials necessary to complete the work for the sum of

BID SCHEDULE					
Furnish all labor, equipment, materials, and incidentals necessary to provide Lake Dam Improvements located at Buescher State Park in accordance with the Invitation to Bid and Contract Documents for the following:					
BASE BID ITEMS NO. 1 – 77					
ALL WORK					
ITEM		ESTIMATED	UOM	UNIT PRICE	PRICE
1	Bonds and Insurance	1	LS		\$
2	Mobilization	1	EA		\$
3	General Conditions	1	LS		\$
4	Preparing the Right of Way	8	AC		\$
5	Demobilization	1	EA		\$
SUBTOTAL ALL WORK					\$
REMOVAL					
ITEM		ESTIMATED	UOM	UNIT PRICE	PRICE
6	Tree & Stump Removal (Clearing and Grubbing)	170	EA		\$
7	Canoe Shed (Remove, Salvage, & Replace)	1	LS		\$
8	Remove Structure (Retaining Wall)	140	SY		\$
9	Tree Protection	130	EA		\$
10	Remove Structure (Spillway)	300	SY		\$
11	Remove Rock Riprap	1,350	SY		\$
12	Remove Gravel Filter Drain	450	CY		\$
13	Remove and Salvage Gabions (3-FT Width X 3-FT Height)	45	CY		\$

14	Remove Existing Sewer Pipe	150	LF		\$
15	Remove Existing Manhole	1	EA		\$
16	Remove Exist Abandoned Concrete Septic Tank (~5,000 Gal)	1	EA		\$
17	Cut and Plug Existing Sanitary Sewer Line	2	EA		\$
SUBTOTAL - REMOVAL					\$
EARTHEN EMBANKMENT					
18	Excavation	1,000	CY		\$
19	Embankment (Import)	13,300	CY		\$
20	Toe Drain and Blankets (C-33 Fine Aggregate)	610	CY		\$
21	Toe Drain Outfall (3-INX5-IN Bull Rock) (Native Stone)	60	CY		\$
22	Geotextile (Nonwoven) (10 OZ/SY)	2,010	SY		\$
23	Locally Sourced River Rock Gravel Access Path (1/2-IN Minus, 6-IN Depth)	850	SF		\$
24	6-IN Flexbase	30	CY		\$
25	6-IN Compacted Subgrade	140	SY		\$
26	2-FT Ribbon Curb	60	LF		\$
27	Post & Cable Gate	50	LF		\$
SUBTOTAL - EMBANKMENT					\$
SPILLWAY & CHUTE					
28	Control of Water	21	MO		\$
29	Temp Cofferdam (306-FT Length X 6-FT Avg Height) (Face)	1,840	SF		\$
30	Excavation (Dense Sand and Sandstone)	21,500	CY		\$
31	Embankment (Import)	7,540	CY		\$
32	Controlled Low Strength Material (CLSM)	450	CY		\$
33	Concrete Sharp-Crested Weir, Integral Color (21-IN Thick)	3,320	SF		\$
34	Concrete Stilling Basin, Integral Color	1,030	CY		\$
35	Concrete Baffle Blocks and End Sill, Integral Color	50	CY		\$

36	Concrete Retaining Walls, Integral Color	4,890	SF		\$
37	Rock/Soil Anchors	1,580	LF		\$
38	Retaining Wall Drain Pipe (6-IN PVC)	330	LF		\$
39	Retaining Wall Gravel Filter Drain	370	CY		\$
40	Pedestrian Rail	350	LF		\$
41	10-FT X 10-FT Sluice Gate Shaft, Integral Color	1	EA		\$
42	6-FT X 6-FT Underdrain Manhole, Integral Color	2	EA		\$
43	Stilling Basin Underdrain Perforated Pipe (6-IN HDPE SD11)	220	LF		\$
44	Stilling Basin Underdrain Perforated Pipe (8-IN HDPE SD11)	250	LF		\$
45	Hatch	3	EA		\$
46	Nape Air Vents	2	EA		\$
47	Concrete Chute Slab (12-IN Thick)	890	SY		\$
48	Rock Riprap Downstream Chute (D50=9", 18-IN Thick)	1,140	CY		\$
49	Rock Riprap Upstream Slope Protection (D50=15", 30-IN Thick)	450	CY		\$
50	Rock Riprap Upstream Slope Protection (D50=9-IN, 18-IN Thick)	100	CY		\$
51	Rock Riprap Training Berm (D50=9-IN, 18-IN Thick)	160	CY		\$
52	Rock Riprap Training Berm (D50=15-IN, 30-IN Thick)	330	CY		\$
53	Rock Riprap Launchable Stone (D50=15-IN, 7-FT Thick)	220	CY		\$
54	Ledge Rock Channel (24-IN Length X18-IN Width)	120	CY		\$
55	Rock Riprap Bedding (6-IN Depth)	630	CY		\$
56	Rock Riffles (18-IN Diameter)	50	CY		\$
57	West - Spillway Rock Steps (Ten 7-IN Risers With 18-IN Treads, Concrete Footing, Flagstone Landings-Top and Bottom16.5 LF. Handrail), Ref. Det. 1/L3.02	1	LS		\$
58	East - Spillway Rock Steps (Ten 7-IN Risers With 18-IN Treads, Concrete Footing,	1	LS		\$

	Flagstone Landings-Top and Bottom, 16.5 LF. Handrail), Ref. Det. 1/L3.02				
59	Spillway Maintenance Access Gate	2	EA		\$
60	Spillway Safety Signage	16	EA		\$
61	Reno Mattress (6' Width x 9" Height)	40	CY		\$
62	Concrete Trail Slab, Integral Color	140	SY		\$
SUBTOTAL - SPILLWAY & CHUTE					\$
EROSION CONTROL					
63	General Seeding for Site Stabilization (Revegetation) (Temp. & Permanent) Includes Vegetative Watering	21,900	SY		\$
64	Channel Seeding for Site Stabilization (Revegetation) (Temp. & Permanent) Includes Vegetative Watering	350	SY		\$
65	4-IN Topsoil	22,250	SY		\$
66	Construction Entrance (Install & Remove)	130	SY		\$
67	Temporary Silt Fence/Toad Exclusion Fence (Install & Remove)	4,780	LF		\$
68	Permanent Soil Retention Blanket (Class 1, Type D)	8,700	SY		\$
69	Permanent Soil Retention Blanket (Class 2, Type E)	350	SY		\$
70	Permanent Soil Retention Blanket (Class 2, Type G)	570	SY		\$
71	Rock Filter Dam (Install and Remove)	90	LF		\$
SUBTOTAL - EROSION CONTROL					\$
MISCELLANEOUS					
72	SWPPP Preparation	1	LS		\$
73	Barricades, Signs, And Traffic Handling	21	MO		\$
74	Downstream Embankment Weir	6	CY		\$
75	Temporary Chain Link Fence (Staging Areas)	3600	LF		\$
76	Temporary Culvert Shoring	2	EA		\$
77	Temporary Construction Facilities & Controls	21	MO		\$
SUBTOTAL- MISCELLANEOUS					\$
TOTAL BASE BID ITEMS NO. 1 - 77					\$

Total Base Bid Items 1-77 written in words

ADDITIVE ALTERNATE NO. 1 - Furnish all labor, equipment, materials, and incidentals necessary to provide Shoreline Improvements located at Buescher State Park in accordance with the Invitation to Bids and Contract Documents for the following:

78	Boat Launch Turndown (Includes Saw Cut Asphalt, Excavation and Concrete Work), Ref. Detail 1/L3.01	1	EA		\$
79	Typical Rock Wall (24-IN W X 30-IN H Max., Concrete Footing), Ref. Det. 2/L3.01	690	LF		\$
80	Typical Rock Steps (Three 8-IN Risers With 24-IN Treads, Concrete Footing), Ref. Det. 3/L3.01	110	LF		\$
81	Typical Rock Seat wall (24-IN W X 24-IN H Max., Conc. Footing), Ref. Det. 5/L3.01	100	LF		\$
82	Compacted Decomposed Granite with Binder (6-IN Depth)	3,130	SF		\$
83	Locally Sourced River Rock Gravel (1/2" Minus, 4-IN Depth)	3,220	SF		\$
84	Excavation	125	CY		\$
85	Embankment (Native Backfill)	120	CY		
86	Mobilization	1	EA		\$
87	Demobilization	1	EA		

TOTAL ADDITIVE ALTERNATE NO. 1 \$

Total ADD ALT. NO. 1 written in words

TOTAL BASE BID ITEMS NO. 1-77 + ADDITIVE ALTERNATE. NO. 1 \$

Total Base Bid + ADD ALT. NO. 1 written in words

EACH BID ITEM INCLUDES ANY AND ALL APPURTENANT WORK AND ITEMS NECESSARY FOR FULLY FUNCTIONAL AND OPERATIONAL SYSTEMS, COMPLETE

AND IN PLACE, IN ACCORDANCE WITH THE INVITATION FOR BIDS AND CONTRACT DOCUMENTS.

The determination of the low bidder will be based on responsiveness and responsibility of the bidder and on the **TOTAL BASE BID ITEMS No. 1-77 plus (+) ADDITIVE ALTERNATE No. 1. HOWEVER, THE OWNER RESERVES THE RIGHT TO AWARD TO THE LOW BIDDER ANY COMBINATION OF BID ITEMS OR TO REJECT ALL BIDS.**

BIDDER UNDERSTANDS AND ACKNOWLEDGES THAT BIDDER MUST MEET THE MINIMUM QUALIFICATION AND/OR EXPERIENCE REQUIREMENTS SET FORTH IN THE **INSTRUCTIONS TO BIDDERS, PARAGAPH 12 TO BE ELIGIBLE FOR AWARD OF THIS CONTRACT. BIDDER, BY SIGNING THIS BID, AFFIRMS THAT BIDDER MEETS SUCH MINIMUM REQUIREMENTS. FAILURE TO MEET ANY OF THE MINIMUM QUALIFICATIONS SHALL RESULT IN REJECTION OF THE BID.**

The undersigned further agrees that, if awarded the Contract, the work will be completed within **six hundred thirty (630)** calendar days commencing on the date specified in the Notice to Proceed. This performance period includes completing the various aspects required to complete the Work, including submittal of all required Submittals, mobilization, procurement, installation, testing, inspection and delivery of documents described in the Uniform General Conditions, Article 12, 12.1.1.1.

The undersigned agrees that when written notice of bid acceptance is furnished by the Owner within **sixty (60)** calendar days after the bid opening date, the undersigned will, within the stipulated time, execute and deliver the contract and all required bonds, certificates of insurance, submittals and Form 1295 to the Owner. Failure to timely provide the insurance certificate, bonds, and submittals shall be grounds for disqualification of bid and forfeiture of bid security. In such circumstances, TPWD shall be authorized to proceed with award to the next lowest, responsive and responsible bidder.

If the above bid amount exceeds \$25,000.00, the undersigned shall include herewith security in the form of a bid bond, certified check, or cashier's check for an amount not less than five percent (5%) of the total amount of the bid to be awarded by Owner, unless otherwise stipulated under Instructions to Bidders. To ensure adequate bid security, bidders should calculate bid security based on the total amount of all base bids plus all additive alternate bids (if any). The bid security will be returned to or forfeited by the undersigned in accordance with the Bid Security provision in the Instructions to Bidders. The undersigned further agrees that this bid security is the appropriate measure of liquidated damages which the Owner will sustain by the failure of the undersigned to execute and deliver said contract and required documents.

The undersigned agrees that this bid will not be withdrawn for a period of **sixty (60)** calendar days from the date set for the bid opening, and the undersigned further agrees that the bid security will be forfeited in the event this bid is withdrawn before expiration of said **sixty (60)** calendar days.

Respondent represents and warrants that if selected for award of a contract as a result of the Solicitation, respondent will submit to TPWD a Certificate of Interested Parties prior to contract execution in accordance with Section 2252.908 of the Texas Government Code.

Additional information can be found at:

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

Bidder represents and warrants that, in accordance with Section 2155.005 of the Texas Government Code, neither the bidder, nor the firm, corporation, partnership, or institution represented by the bidder, or anyone acting for such firm, corporation, or institution has (1) violated any provision of the Texas Free Enterprise and Antitrust Act of 1983, Chapter 15 of the *Texas Business and Commerce Code*, or the Federal antitrust laws, or (2) communicated directly or indirectly the contents of this bid to any competitor or any other person engaged in the same line of business as the bidder.

Pursuant to *Texas Government Code*, Title 10, Subchapter A, §2155.004 (a), Bidder certifies that neither bidder nor any person or entity represented by bidder has received compensation from TPWD to participate in the preparation of the specifications or solicitation on which this bid or contract is based. Under §2155.004 (b) of the Texas Government Code, Bidder certifies that the individual or business entity named in this bid or contract is not ineligible to receive the specified contract and acknowledges that the contract may be terminated, and payment withheld if this certification is inaccurate.

Pursuant to *Texas Government Code*, Title 10, Subchapter A, §2155.004 (b), §2155.006 (c), and Subchapter B, §2261.053 (c), Bidder certifies that the individual or business entity named in this bid is not ineligible to receive the specified contract and acknowledges that this contract may be terminated and payment withheld if this certification is inaccurate.

By signature hereon, the bidder hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171, Tax Code. Making a false statement as to corporate tax status is a material breach of contract.

Bidder certifies that the bidding entity and its principals are eligible to participate in this transaction and have not been subjected to suspension, debarment, or similar ineligibility determined by any federal, state or local governmental entity. Entities ineligible for federal procurement are listed at <http://www.sam.gov>.

Bidder certifies that it is not listed in the prohibited vendors list authorized by Executive Order No. 13224, "Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism", published by the United States Department of the Treasury, Office of Foreign Assets Control.

Under Section 2155.0061 of the Texas Government Code, the Respondent certifies that the individual or business entity named in this Response or contract is not ineligible to receive the specified contract and acknowledges that this contract may be terminated, and payment withheld if this certification is inaccurate.

Pursuant to Section 2155.003 of the Texas Government Code, bidder represents and warrants that it has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with the contract.

Bidder agrees that any payments due under this contract shall be applied towards any debt or delinquency that is owed to the State of Texas.

Bidder represents and warrants its compliance with the requirements of the Americans

With Disabilities Act (ADA0 and its implementing regulations, as each may be amended.

Bidder agrees to comply with *Texas Government Code*, Title 10, Subtitle D, §2155.4441, relating to use of service contracts and the purchase of products and materials produced in the State of Texas.

Bidder certifies that if a Texas address is shown as the address of the Bidder on this bid, Bidder qualifies as a Texas Bidder as defined in Section 2155.444(c) of the Texas Government Code.

If Bidder is required to make a certification pursuant to Section 2271.001 of the Texas Government Code, Bidder certifies that Bidder does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. If Bidder does not make that certification, Bidder must indicate that in its Bid and state why the certification is not required.

Section 2252.152 of the Texas Government Code prohibits TPWD from awarding a contract to any person who does business with Iran, Sudan, or a foreign terrorist organization as defined in Section 2252.151 of the Texas Government Code. Bidder certifies that it is not ineligible to receive the contract.

By signature hereon, the bidder acknowledges that *Texas Government Code*, Title 10, Subchapter F, §§ 2252.201-2252.205 requires that all iron or steel products produced through a manufacturing process used in this project must be produced in the United States. By signing this bid, Bidder certifies that its bid price represents full compensation for compliance with the requirements of *Texas Government Code*, Title 10, Subchapter F, §§ 2252.201-2252.205.

Pursuant to Section 2254.0031 of the Texas Government Code, which incorporates by reference Section 271.904(d) of the Texas Local Government Code, Bidder shall perform services (1) with professional skill and care ordinarily provided by competent engineers or architects practicing under the same or similar circumstances and professional license, and (2) as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.

By signing this bid, Bidder acknowledges and understands that the acceptance of funds by the Bidder or any other entity or person directly under this Contract, or indirectly through a subcontract under this Contract, shall constitute acceptance of the authority of the State Auditor's Office, Comptroller or other agency of the State of Texas, TPWD or any successor agency, to conduct an audit or investigation in connection with those funds. The Bidder further agrees to cooperate fully with the above parties in the conduct of the audit or investigation, including providing access to any information the state auditor considers relevant to the investigation or audit. The Bidder shall ensure that this paragraph concerning the State's authority to audit funds received indirectly by subcontractors through the Bidder and the requirement to cooperate is included in any subcontract it awards.

Bidder represents and warrants that the provision of goods and services or other performance under the contract will not constitute an actual or potential conflict of interest or reasonably create an appearance of impropriety.

Under Section 231.006(d) of the Texas Family Code, regarding child support, the Bidder

certifies that the individual or business entity named in this bid is not ineligible to receive the specified payment and acknowledges that the contract may be terminated, and payment may be withheld if this certification is inaccurate. Furthermore, any Bidder subject to Section 231.006 of the Texas Family Code, must include, in the spaces(s) below, the names and Social Security numbers of each person with at least 25% ownership of the business entity submitting the bid.

Name	SSN	%
Name	SSN	%
Name	SSN	%
Name	SSN	%

FEDERAL PRIVACY ACT NOTICE: This notice is given pursuant to the Federal Privacy Act. Disclosure of your Social Security Number (SSN) is required under Section 231.006(c) and Section 231.302(c)(2) of the Texas Family Code. The SSN will be used to identify persons that may owe child support. The SSN will be kept confidential to the fullest extent allowed under Section 231.302(e), Texas Family Code.

Under Section 669.003 of the *Texas Government Code*, Bidder certifies that it does not employ, or has disclosed its employment of, any former executive head of the agency. Bidder must provide the following information in the bid.

Name of former executive: _____
Name of State agency: _____
Date of separation from State agency: _____
Position with Bidder: _____
Date of employment with Bidder: _____

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RECEIPT IS HEREBY ACKNOWLEDGED OF THE FOLLOWING ADDENDA TO THIS IFB (INITIAL IF APPLICABLE)

No. 01 _____ **No. 02** _____ **No. 03** _____ **No. 04** _____ **No. 05** _____
No. 06 _____

WARNING: BIDDER'S FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA MAY RESULT IN REJECTION OF BID.

BIDDER'S AFFIRMATION: SIGNING THIS BID WITH A FALSE STATEMENT OR MATERIAL MISREPRESENTATIONS MADE DURING THE PERFORMANCE OF A CONTRACT IS A MATERIAL BREACH OF CONTRACT AND SHALL VOID THE SUBMITTED BID OR ANY RESULTING CONTRACTS.

The undersigned certifies that I am duly authorized to submit this bid and execute a contract on my own behalf or on behalf of the bidder listed below.

_____ Name of Contracting Firm	By _____ Authorized Signature	_____ Date
_____ Address	_____ Printed Name	
_____ City	_____ State	_____ Zip
_____ (Area Code) Phone Number		_____ Title
_____ (Area Code) Phone Number		_____ Title
_____ Email address	_____ (Area Code) Phone Number	
_____ Texas Identification Number	_____ (Area Code) FAX Number	
	_____ (Area Code) Cell Number	

Special Instructions to Bidders

If there is any discrepancy or confusion with contractual language contained in these technical specifications the contractual provisions and methods within the Texas Parks and Wildlife Department's Uniform General Conditions 2015 (UGC) document will govern this project.

Any reference in the technical specifications to "the Contracting Officer" relates to the TPWD's Owner's Designated Representative (ODR). Submittals will follow the TPWD's regular submittal review process in the UGC. Payment methods referenced in the specifications are superseded by the UGC standard practices.

Prior to any installation of work beyond the estimated quantities stated in the bid schedule, Contractor is responsible for notifying TPWD ODR of any variances in line item quantities using the processes described below:

- Contractor is responsible to develop a report to track and monitor all quantities by line item of the approved schedule of values, in a manner acceptable to the Owner
 - o Provide a status update of all quantities overrun or under on weekly conference call meetings
 - o Contractor shall submit to TPWD a weekly "materials quantities report" in a manner acceptable to the Owner.

For increases in quantities, Contractor shall submit a Contractor's Change Proposal (CCP) following the process outlined in the Uniform General Conditions, Article 11.

Contractor shall be responsible to provide sufficient notice of any quantity discrepancies to the Owner so as to avoid delays in the Work.



SECTION 050523.16

STRUCTURAL WELDING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

All the standard project management coordination, scheduling and reporting requirements are already provided for in the Texas Parks and Wildlife Department's Uniform General Conditions 2015 (UGC). The contractual provisions and methods established within the UGC document will govern this project if there is any discrepancy or confusion with contractual language contained in these technical specifications.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC 360 (2016) Specification for Structural Steel Buildings

AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)

ANSI/ASNT CP-189 (2016) ASNT Standard for Qualification and Certification of Nondestructive Testing Personnel (ANSI/ASNT CP-105-2006)

AMERICAN WELDING SOCIETY (AWS)

AWS A2.4 (2012) Standard Symbols for Welding, Brazing and Nondestructive Examination

AWS D1.1/D1.1M (2015; Errata 1 2015; Errata 2 2016) Structural Welding Code - Steel

AWS D1.3/D1.3M (2018) Structural Welding Code - Sheet Steel

AWS D1.4/D1.4M (2011) Structural Welding Code - Reinforcing Steel

AWS D1.8/D1.8M (2016) Structural Welding Code—Seismic Supplement



AWS D14.4/D14.4M	(2012) Specification for Welded Joints for Machinery and Equipment
AWS QC1	(2016) Specification for AWS Certification of Welding Inspectors
AWS Z49.1	(2012) Safety in Welding and Cutting and Allied Processes
ASTM INTERNATIONAL (ASTM)	
ASTM E165/E165M	(2012) Standard Practice for Liquid Penetrant Examination for General Industry
ASTM E709	(2015) Standard Guide for Magnetic Particle Examination

1.3 SUBMITTALS

Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

Preconstruction Submittals	Welding Quality Assurance Plan
Product Data	Welding Procedure Qualifications
	Welder, Welding Operator, and Tacker Qualification
	Previous Qualifications
	Pre-Qualified Procedures
	Welding Electrodes and Rods
	Test Reports Nondestructive Testing
	Weld Inspection Log
Certificates	Certified Welding Procedure Specifications (WPS)
	Certified Brazing Procedure Specifications (BPS)
	Certified Procedure Qualification Records (PQR)
	Certified Welder Performance Qualifications
	(WPQ) Certified Brazer Performance
	Qualifications (BPQ)
	Certified Welding Inspector
	Nondestructive Testing Personnel



1.4 QUALITY ASSURANCE

Except for pre-qualified (in accordance with AWS D1.1/D1.1M) and previously qualified procedures, each Contractor performing welding must record in detail and qualify the welding procedure specification for any welding procedure followed in the fabrication of weldments. Conform welding procedure qualifications to AWS D1.1/D1.1M and to the specifications in this section. Submit for approval copies of the welding procedure specification and the procedure qualification records for each type of welding being performed. Submission of the welder, welding operator, or tacker qualification test records is also required. Approval of any procedure, however, does not relieve the Contractor of the sole responsibility for producing a finished structure meeting all the specified requirements. Submit this information on the forms in Annex M of AWS D1.1/D1.1M. Individually identify and clearly reference on the detail drawings and erection drawings all welding procedure specifications, or suitably key them to the contract drawings. In case of conflict between this specification and AWS D1.1/D1.1M, this specification governs.

1.4.1 General Requirements

Fabricate work in an AISC Certified Fabrication Plant, Category BU. Erect work by an AISC Certified Erector, Category CSE.

- a. For Structural Projects, provide documentation of the following:
 - (1) Component Thickness 3 mm 1/8 inch and greater: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D1.1/D1.1M.
 - (2) Component Thickness Less than 3 mm 1/8 inch: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D1.3/D1.3M.
 - (3) Reinforcing Steel: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D1.4/D1.4M.
- b. For other applications, provide documentation of the following:
 - (1) Submit two copies of the Certified Welding Procedure Specifications (WPS), Certified Brazing Procedure Specifications (BPS) and Certified Procedure Qualification Records (PQR) to TPWD for approval.
 - (2) Submit two copies of the Certified Welder Performance Qualifications (WPQ) and Certified Brazer Performance Qualifications (BPQ) to the Contracting Officer for approval within fifteen calendar days prior to any employee welding on the project material.
 - (3) Machinery: Qualification documents (WPS, PQR, and WPQ) in accordance with AWS D14.4/D14.4M.

1.4.2 Previous Qualifications

Welding procedures previously qualified by test in accordance with AWS D1.1/D1.1M, may be accepted for this contract without re-qualification, upon receipt of the test results, if the following conditions are met:

- a. Testing was performed by an approved testing laboratory, technical consultant, or the Contractor's approved quality control organization.
- b. The qualified welding procedure conforms to the requirements of this specification and is applicable to welding conditions encountered under this contract.



- c. The welder, welding operator, and tacker qualification tests conform to the requirements of this specification and are applicable to welding conditions encountered under this contract.

1.4.3 Pre-qualified Procedures

Welding procedures which are considered pre-qualified as specified in AWS D1.1/D1.1M will be accepted without further qualification. Submit for approval a listing or an annotated drawing to indicate the joints not pre-qualified. Procedure qualification is mandatory for these joints.

1.4.4 Welder, Welding Operator, and Tacker Qualification

Each welder, welding operator, and tacker assigned to work on this contract must be qualified in accordance with the applicable requirements of AWS D1.1/D1.1M and as specified in this section. Welders, welding operators, and tackers who make acceptable procedure qualification test welds will be considered qualified for the welding procedure used within the applicable essential variables for welder qualification.

1.4.4.1 Previous Personnel Qualifications

At the discretion of the Contracting Officer, welders, welding operators, and tackers qualified by test within the previous 6 months may be accepted for this contract without re-qualification if all the following conditions are met:

- a. Copies of the welding procedure specifications, the procedure qualification test records, and the welder, welding operator, and tacker qualification test records are submitted and approved in accordance with the specified requirements for detail drawings.
- b. Testing was performed by an approved testing laboratory, technical consultant, or the Contractor's approved quality control organization.
- d. The welder, welding operator, and tacker qualification tests conform to the requirements of this specification and are applicable to welding conditions encountered under this contract.

1.4.4.2 Certificates

Before assigning any welder, welding operator, or tacker to work under this contract, submit the names and certification that each individual is qualified as specified. State in the certification the type of welding and positions for which the welder, welding operator, or tacker is qualified, the code and procedure under which the individual is qualified, the date qualified, and the name of the firm and person certifying the qualification tests. Keep the certification current, on file, and furnish 3 copies.

1.4.4.3 Renewal of Qualification

Re-qualification of a welder or welding operator is required under any of the following conditions:

- a. It has been more than 6 months since the welder or welding operator has used the specific welding process for which he is qualified.
- b. There is specific reason to question the welder or welding operator's ability to make welds that meet the requirements of these specifications.
- c. The welder or welding operator was qualified by an employer other than those firms performing work under this contract, and a qualification test has not been taken within the past 12 months. Submit as



evidence of conformance all records showing periods of employment, name of employer where welder, or welding operator, was last employed, and the process for which qualified.

- d. A tacker who passes the qualification test is considered eligible to perform tack welding indefinitely in the positions and with the processes for which he/she is qualified, unless there is some specific reason to question the tacker's ability or there has been a gap greater than 6 months since he/she last used the process. In such a case, the tacker is required to pass the prescribed tack welding test.

1.4.5 Inspector Qualification

Submit certificates indicating that certified welding inspectors meet the requirements of AWS QC1. Submit qualifications for nondestructive testing personnel in accordance with the requirements of ANSI/ASNT CP-189 for Levels I or II in the applicable nondestructive testing method. Level I inspectors must have direct supervision of a Level II inspector.

1.4.6 Symbols and Safety

Use symbols in accordance with AWS A2.4, unless otherwise indicated. Follow safe welding practices and safety precautions during welding in conformance with AWS Z49.1.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

Conform the design of welded connections to AISC 360, unless otherwise indicated or specified. Material with welds will not be accepted unless the welding is specified or indicated on the drawings or otherwise approved. Perform welding as specified in this section, except where additional requirements are shown on the drawings or are specified in other sections. Do not commence welding until welding procedures, inspectors, nondestructive testing personnel, welders, welding operators, and tackers have been qualified and the submittals approved by the Contracting Officer. Perform all testing at or near the work site. Maintain records of the test results obtained in welding procedure, welder, welding operator, and tacker performance qualifications.

2.1.1 Pre-erection Conference

Hold a pre-erection conference prior to the start of the field welding, to bring all affected parties together and to gain a naturally clear understanding of the project and the Welding Procedure Specifications (WPS) (submitted for all welding, including welding done using pre-qualified procedures). Mandatory attendance is required by all Contractor's welding production and inspection personnel and appropriate Government personnel. Include as items for discussion: responsibilities of various parties; welding procedures and processes to be followed; welding sequence (both within a joint and joint sequence within the building); inspection requirements and procedures, both visual and nondestructive testing; welding schedule; and other items deemed necessary by the attendees.

2.2 WELDING EQUIPMENT AND MATERIALS

Provide all welding equipment, welding electrodes and rods, welding wire, and fluxes capable of producing satisfactory welds when used by a qualified welder or welding operator. Use E70 welding electrodes. Provide



welding equipment and materials that comply with the applicable requirements of AWS D1.1/D1.1M. Submit product data on welding electrodes and rods.

PART 3 - EXECUTION

3.1 WELDING OPERATIONS

3.1.1 Requirements

Conform workmanship and techniques for welded construction to the requirements of AWS D1.1/D1.1M and AISC 360. When AWS D1.1/D1.1M and the AISC 360 specification conflict, the requirements of AWS D1.1/D1.1M govern.

3.1.2 Identification

Identify all welds in one of the following ways:

- a. Submit written records to indicate the location of welds made by each welder, welding operator, or tacker.
- b. Identify all work performed by each welder, welding operator, or tacker with an assigned number, letter, or symbol to identify welds made by that individual. The Contracting Officer may require welders, welding operators, and tackers to apply their symbol next to the weld by means of rubber stamp, felt-tipped marker with waterproof ink, or other methods that do not cause an indentation in the metal. Place the identification mark for seam welds adjacent to the weld at 1 m 3 foot intervals. Identification with die stamps or electric etchers is not allowed.

3.2 QUALITY CONTROL

Perform testing using an approved inspection or testing laboratory or technical consultant; or if approved, the Contractor's inspection and testing personnel may be used instead of the commercial inspection or testing laboratory or technical consultant. A Certified Welding Inspector must perform visual inspection on 100 percent of all welds. Document this inspection in the Visual Weld Inspection Log. Test 50% of CJP welds using ultrasonic testing per Table 6.2 of AWS D1.1/D1.1M. Randomly test 50% of all PJP and fillet welds or as indicated by magnetic particle or dye penetrant testing. Verify the welds conform to paragraph STANDARDS OF ACCEPTANCE. Conform procedures and techniques for inspection with applicable requirements of AWS D1.1/D1.1M ASTM E165/E165M, and ASTM E709. Submit a Welding Quality Assurance Plan and records of tests and inspections.

3.3 STANDARDS OF ACCEPTANCE

Conform dimensional tolerances for welded construction, details of welds, and quality of welds with the applicable requirements of AWS D1.1/D1.1M and the contract drawings. Submit all records of nondestructive testing.

3.3.1 Nondestructive Testing

The welding is subject to inspection and tests in the mill, shop, and field. Inspection and tests in the mill or shop do not relieve the Contractor of the responsibility to furnish weldments of satisfactory quality. When materials



or workmanship do not conform to the specification requirements, the Government reserves the right to reject material or workmanship or both at any time before final acceptance of the structure containing the weldment. Any indication of a defect is regarded as a defect, unless re-evaluation by nondestructive methods or by surface conditioning shows that no unacceptable defect is present. Submit all records of nondestructive testing in accordance with paragraph STANDARDS OF ACCEPTANCE.

3.3.2 Destructive Tests

Make all repairs when metallographic specimens are removed from any part of a structure. Employ only qualified welders or welding operators, and use the proper joints and welding procedures, including peening or heat treatment if required, to develop the full strength of the members and joints cut and to relieve residual stress.

3.4 GOVERNMENT INSPECTION AND TESTING

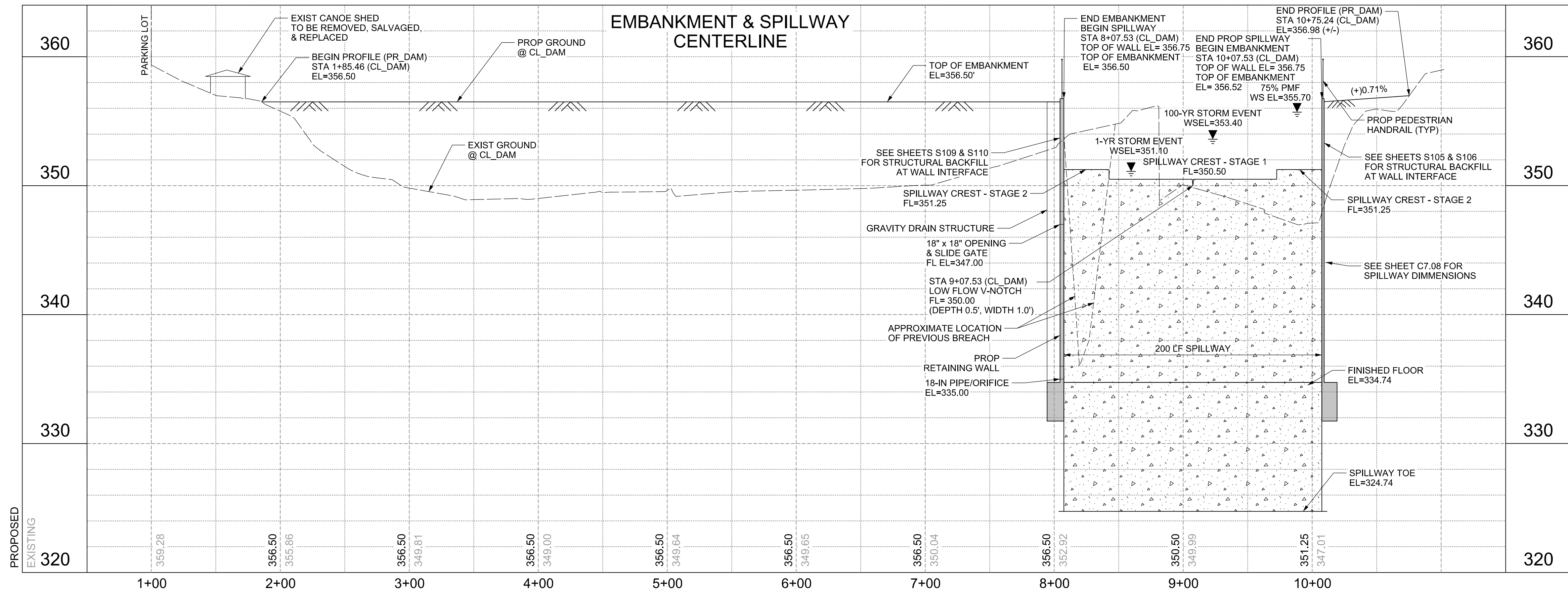
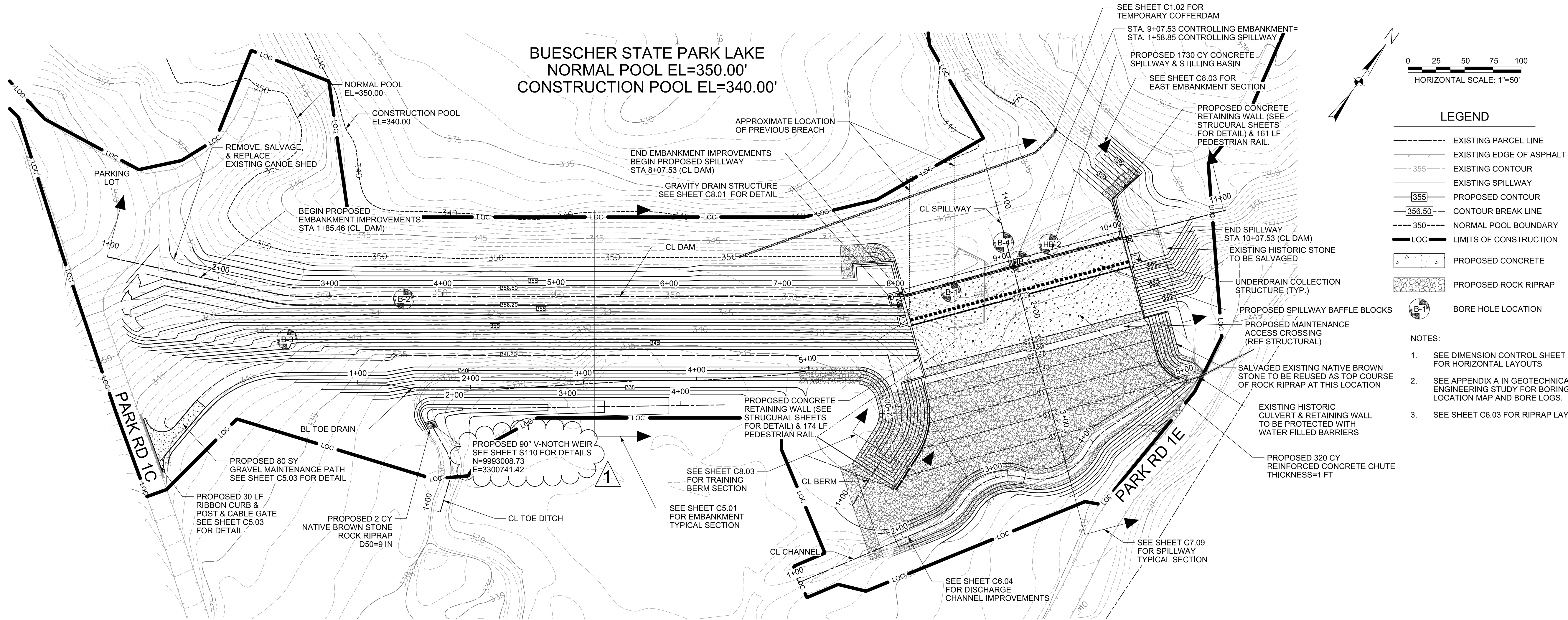
In addition to the inspection and tests performed by the Contractor for quality control, the Government will perform inspection and testing for acceptance to the extent determined by the Contracting Officer. The work may be performed by the Government's own forces or under a separate contract for inspection and testing. The Government reserves the right to perform supplemental nondestructive and destructive tests to determine compliance with paragraph STANDARDS OF ACCEPTANCE.

3.5 CORRECTIONS AND REPAIRS

If inspection or testing indicates defects in the weld joints, repair defective welds using a qualified welder or welding operator as applicable. Conduct corrections in accordance with the requirements of AWS D1.1/D1.1M and the specifications. Repair all defects in accordance with the approved procedures. Repair defects discovered between passes before additional weld material is deposited. Wherever a defect is removed and repair by welding is not required, blend the affected area into the surrounding surface to eliminate sharp notches, crevices, or corners. After a defect is thought to have been removed, and before re-welding, examine the area by suitable methods to ensure that the defect has been eliminated. Repaired welds must meet the inspection requirements for the original welds.

END OF SECTION 050523.16





TEXAS PARKS AND WILDLIFE
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TBP&LS ENGINEERING FIRM #312

BUESCHER STATE PARK
LAKE DAM IMPROVEMENTS
TPWD# 118686



Revision No.	Date	Description
1	04/02/2021	ADDENDUM #1

PROJECT NUMBER: 118686
DATE: 1/20/2021
Sheet Title
DAM PLAN & PROFILE

Sheet Number
C5.02



1. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
2. THE CONTRACTOR SHALL CONSTRUCT EARTHEN EMBANKMENTS WITH SLOPES NO STEEPER THAN 3:1
3. AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE DISTURBED.
4. EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM ON THE GROUND SURVEY, VERTICAL AND/OR HORIZONTAL ADJUSTMENTS DURING CONSTRUCTION TO ACCOMMODATE ACTUAL FIELD CONDITIONS MAY BE REQUIRED. ALIGNMENT AND GRADE CHANGES SHALL BE APPROVED BY THE DESIGN CONSULTANT.

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● FG 598.00	PROPOSED FINISHED GRADE
● TW 598.00	TOP OF WALL
● TS 598.00	TOP OF STEP
● BS 598.00	BOTTOM OF STEP
--- 598 ---	EXISTING GRADE
<u>598</u>	PROPOSED GRADE

- | | |
|---|-------------------------|
| ● FG 598.00 | PROPOSED FINISHED GRADE |
| ● TW 598.00 | TOP OF WALL |
| ● TS 598.00 | TOP OF STEP |
| ● BS 598.00 | BOTTOM OF STEP |
| --- 598 --- | EXISTING GRADE |
| <u>598</u> | PROPOSED GRADE |



PROJECT NUMBER:	118686
DATE:	01/20/2021
Sheet Title	SHORELINE GRADING PLAN (EAST)
Sheet Number	1303

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DATE:	01/20/2021
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Sheet Number **L2.02**

TEXAS PARKS AND WILDLIFE
CIVIL ENGINEERING SERVICE
INFRASTRUCTURE AND PLANNING DESIGN

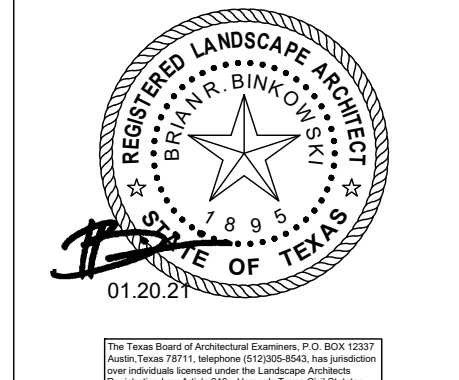
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**BUESCHER STATE PARK
LAKE DAM IMPROVEMENTS
TPWD# 118686**



**Questions Received for Project No. 118686 – Lake Dam Improvements at
Buescher State Park**

1. The note for V-Notch Weir on drawing C5.02 states to see drawing S114 for details, however, there is no S114 in the drawing set. Where is this drawing?
Refer to sheet S110 for V-Notch weir detail. See revised Sheet C5.02 as part of addendum #1.
2. What was the reasoning for phasing the project (i.e.: Phase 1 / Phase 2)?
Reasoning for phasing is largely due to limited staging and storage area. Phasing helps to keep area below earthen embankment free for contractor staging and storage. Alternative phasing can be proposed by contractor with approval from TPWD. Limits of construction are fixed and cannot be expanded without approval.
3. Where would employee/subcontractor parking be allowed?
Refer to sheet C1.11, C1.12. Contractor employee parking will be allowed in the 'fish and picnic' area east of the spillway.
4. How long is construction schedule? Is it more than a year long?
Per the notice to bidders, all work should be completed within 630 calendar days commencing on the date specified by the Notice to Proceed.
5. Has there already been a survey for Houston toads within the Limits of Construction (LOC), and if so, then are there any toads known to be within the LOC? *See special note below
No, a survey has not yet been conducted in the LOC. In previous projects toads have been observed in the northern portion of the park, but not in area near the project limits.
6. Will any additional surveys for Houston toads in or near the LOC be performed prior to or during construction? *See special note below
Yes. Houston toad inspections will be conducted by TPWD consultants throughout project duration.
7. Are there any other endangered species habitats in or near the LOC?
The project's Biological Assessment determined that there is no suitable habitat for listed species (beyond the Houston Toad) observed within the project area.
8. Does this project have a Houston toad monitor?
Yes.

9. Will our construction crews be required to receive any special training regarding the Houston toad? **See special note below*
Yes. Training will be conducted by TPWD consultant.
10. What procedure, if any, would we be required to follow in the event that we encounter a Houston toad during construction? **See special note below*
Reference sheet G1.01, USACE Permitting Requirements Item 6.
11. Are there any periods of time (e.g. February-April) during the Houston toad's breeding and dispersal season when construction will be suspended? **See special note below*
As noted on sheet G1.01, USACE Permitting Requirements, work will only cease if a Houston Toad is encountered within the LOC. Additionally, FWS has previously defined Houston toad breeding season between the dates of Jan 1 to June 30.
12. Will there be any mandatory work stoppages due to rain? **See special note below*
With regard to Houston Toad it is anticipated that permit requirements will hold a limit of 2-inch accumulation of rain occurring within the work area (as recorded by NOAA weather rainfall total accumulation mapping) during the preceding 48-hour period shall result in a 24-hour minimum stoppage of work.
13. Are there any restrictions on materials that are to be used in the embankment? Can we use the excavated soils for embankment?
Refer to Technical Specifications Section 31 20 00 – Earthwork and Geotechnical Report Section 3.9 for requirements of embankment material. Excavated soils can be used if they meet Embankment specifications. Refer to sheet C5.04 of the plans for bore log information on existing soils.
14. Is there any restriction on placing sod-forming grasses on the embankment?
Sod-forming grasses are prohibited. See G1.01 for specification on native grass seed mix.
15. Is there a list of preferred grasses for planting on the embankment?
See G1.01 for specification on native grass seed mix.
16. Do we need to install silt fencing to function as a barrier to impede Houston toads from entering the LOC? **See special note below*
Yes. See sheet C9.01, note 1. Toad fence shall encompass the entire work area. See sheet C9.03 for Toad Fence detail which functions as silt fence and toad barrier.

**Special Note: The permit has not yet been approved by USACE, THC and USFWS. The guidance provided below are anticipated permit special conditions based on a previous project at this location and could be subject to change once permit has been approved. The permit will be furnished to the contractor upon receipt.*